

# **An Automated System for Peer-Review of Progress Note Quality**

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The VHA Sepulveda outpatient clinics have developed a Visual Basic Program to help perform peer-review of progress note quality. This system has been in place for the past two years and was created to comply with JCAHO standards and Veterans Administration mandates. Review questions focus on whether progress notes are legible and if they document proper identification of the patient, the providers and visit setting, the purpose of visit, the problem list, allergies, habits, psychological and social factors, medications, physical exam, assessment and the treatment plan.

The (Total Quality Improvement) TQI chart review program presents two forms to the reviewer. On the first, the reviewer, the provider, the clinic appointment and the patient must be identified by selection or data entry before the review questions are presented on the second form.

The review form builds up to twenty-four pairs of text boxes to accommodate the questions and default answers. Navigation among the questions is by keyboard arrows or mouse clicks and causes help text to be posted for the question with the focus. Help is displayed according to provider type. Answers are selected by keyboard or mouse clicks. One multiline text box is provided for comments. Answers may be edited only on the same day that they are entered and only by the reviewer who entered them. After that, any editing of the data results in an additional record for that chart with all the same data as before. When the review is completed, the reviewer clicks on a button to store the data and return to the first form.

The program runs in standalone or networked modes. For the networked version, a check in/check out program used by clerks as part of our Ambulatory Care Information System (ACIS)<sup>1</sup> helps flag charts for review. The program assures that two charts per month are saved for each provider. At checkout, clerks are given the option to bypass saving the chart for review if other clinic visits are pending. Flagging the chart for review seeds the TQI database with all available information required by the first review form.

The chart review program is driven by standard relational databases. Questions, answers, and help text are all contained in databases, thereby yielding an easy method for the programmer/administrator to set up or modify studies. Patient identification is selected or entered by keyboard. When the latter occurs, patient databases are searched for visit and provider information. Provider name is either selected from a list or typed.

A companion data-analysis program allows selection of a date range for records to include in reports. It counts the number of progress notes flagged for review and the number actually reviewed and provides tallies for the answers given for each of the questions. A threshold number of failed answers can be set and a progress note is given a pass or fail based on its failed answer count. Critical questions can be set to fail a progress note should any of these questions receive an unacceptable answer. The program includes an option to generate reports by provider or any other selected field, such as team, provider type, department and so on.

For the past fifteen months, the Outpatient Clinics at VHA Sepulveda have reviewed slightly more than 100 charts per month which represents about 45% of the charts flagged for review. Of the 1500 questions answered each month, an average of 14 % (with a range of 7 to 18 %) received a failing mark. With a threshold of progress note failure set at three or more failed questions, about 1/3 of the charts failed the review process. Most of the failed questions related to charting procedures that could be evaluated by any reviewer. More serious issues were identified in about 5 % of the charts reviewed. With the completion of the report generator and its ability to deliver monthly reports by provider, it is expected that the immediate feedback will produce a positive effect on the quality of patient records.

## **References**

1. Rappaport,SH. The ambulatory care information system -- augmenting DHCP with PC workstations and a local area network. *Proceedings of the eighteenth annual symposium on computer applications in medical care*, 1994; 18:1207.